

Exhibit A



US006278455B1

(12) **United States Patent**
 Baker

(10) Patent No.: **US 6,278,455 B1**
 (45) Date of Patent: ***Aug. 21, 2001**

(54) **PICTORIAL INTERFACE FOR ACCESSING INFORMATION IN AN ELECTRONIC FILE SYSTEM**

(76) Inventor: **Michelle Baker, 325 Riverside Dr., Apt #123, New York, NY (US) 10025**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/459,934**

(22) Filed: **Dec. 13, 1999**

Related U.S. Application Data

(63) Continuation of application No. 09/003,553, filed on Jan. 6, 1998, now Pat. No. 6,002,401, which is a continuation of application No. 08/316,518, filed on Sep. 30, 1994, now Pat. No. 5,715,416.

(51) Int. Cl. ⁷ **G06F 3/14**

(52) U.S. Cl. **345/349; 345/335; 345/473**

(58) Field of Search **345/348, 349, 345/350, 351, 346, 356, 357, 335, 977, 968, 302, 113, 115, 121, 473, 435**

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,601,003 * 7/1986 Yoneyama et al. 345/351
 5,021,976 * 6/1991 Wexelblat et al. 345/356
 5,241,671 * 8/1993 Reed et al. 707/104
 5,347,628 * 9/1994 Brewer et al. 345/351
 5,349,658 * 9/1994 O'Rourke et al. 345/349
 5,361,173 * 11/1994 Ishii et al. 360/27
 5,394,521 * 2/1995 Henderson, Jr. et al. 345/346
 5,442,736 * 8/1995 Cummins 345/434
 5,479,602 * 12/1995 Baecker et al. 345/349
 5,524,195 * 6/1996 Clanton, III et al. 345/327
 5,657,462 * 8/1997 Brouwer et al. 345/336
 5,682,469 * 10/1997 Linnett et al. 345/473

OTHER PUBLICATIONS

The Complete HyperCard 2.0 Handbook, 3rd Edition, Danny Goodman, Aug. 1990, pp. 165-168; 170-172; 313-319; and 400-402.

* cited by examiner

Primary Examiner—Crescelle N. dela Torre

(74) Attorney, Agent, or Firm—David P. Gordon; David S. Jacobson; Thomas A Gallagher

(57) **ABSTRACT**

A pictorial user interface for accessing information in an electronic file system provides a pictorial image which is linked to a file directory and which identifies the file directory. Objects in the pictorial image are icons linked to file objects and an animated character is overlaid on the pictorial image. User input causes movement of the animated character relative to the pictorial image. Input from the user is preferably through a limited input device such as a gamepad controller, a mouse, or by using a limited number of keys on a normal keyboard. Input signals are mapped according to keycode identical command sets, context arguments and selection arguments. Commands that can be invoked by the user include operating system commands, pictorial object commands, and interface utility commands. Using the pictorial object commands, the user can configure the interface so that different pictures and icons are associated with different directories and files. Commands are executed with a prologue animation and an epilogue animation. The prologue animation provides feedback as to the nature of the command being executed. The epilogue animation provides feedback as to the results of the command. Animations may include actions of the animated character or the behaviour of a selected icon, or both. The interface may be applied as an overlay to virtually any operating system.

11 Claims, 18 Drawing Sheets

Microfiche Appendix Included
 (1 Microfiche, 81 Pages)



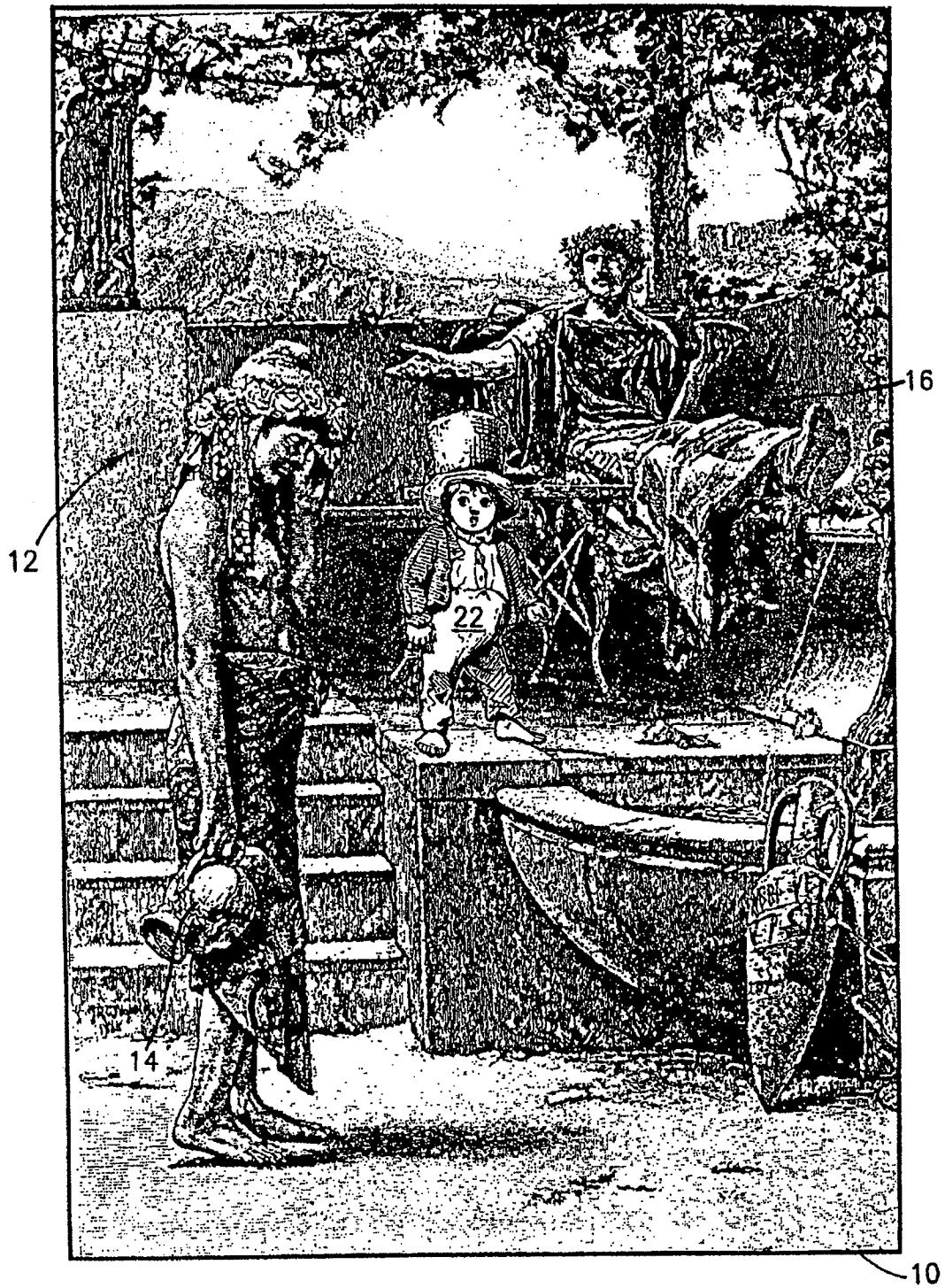
U.S. Patent

Aug. 21, 2001

Sheet 1 of 18

US 6,278,455 B1

FIG. 1



U.S. Patent

Aug. 21, 2001

Sheet 2 of 18

US 6,278,455 B1

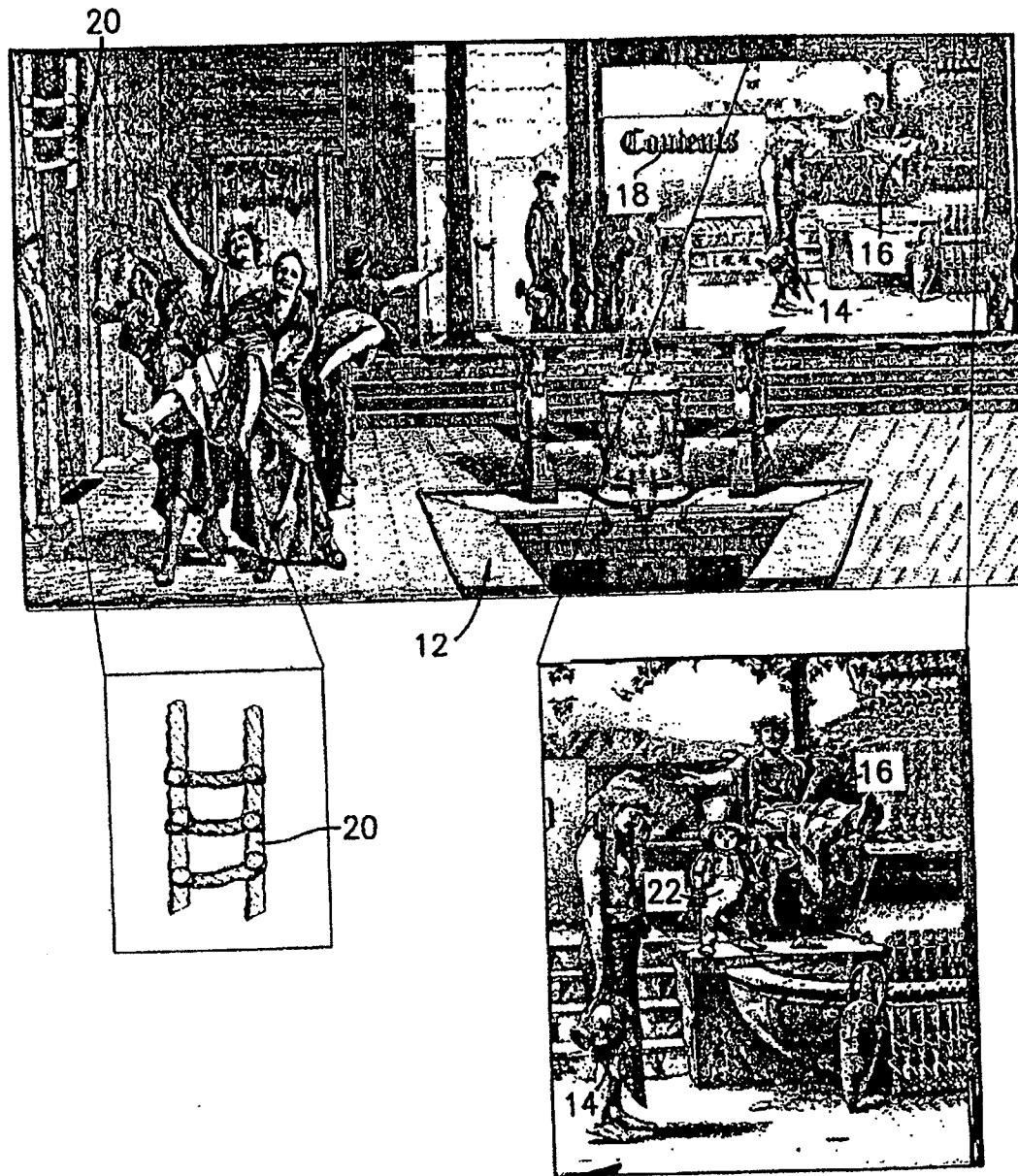


FIG. 1a

U.S. Patent

Aug. 21, 2001

Sheet 3 of 18

US 6,278,455 B1

FIG. 2a

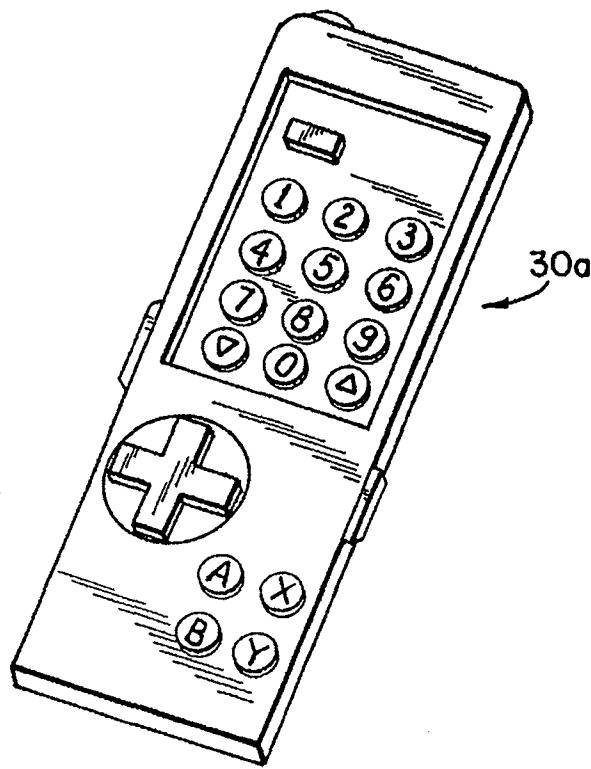
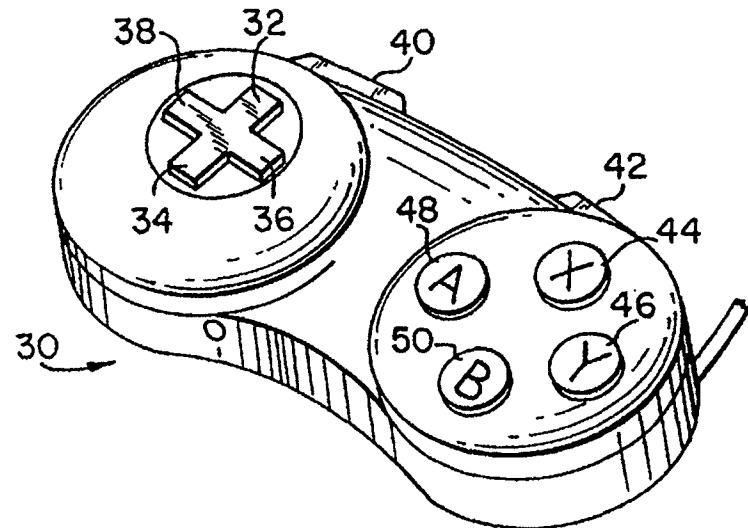


FIG. 2



U.S. Patent

Aug. 21, 2001

Sheet 4 of 18

US 6,278,455 B1



FIG. 3

U.S. Patent

Aug. 21, 2001

Sheet 5 of 18

US 6,278,455 B1



FIG. 3a

U.S. Patent

Aug. 21, 2001

Sheet 6 of 18

US 6,278,455 B1



FIG. 3b

U.S. Patent

Aug. 21, 2001

Sheet 7 of 18

US 6,278,455 B1



FIG. 3c

U.S. Patent

Aug. 21, 2001

Sheet 8 of 18

US 6,278,455 B1

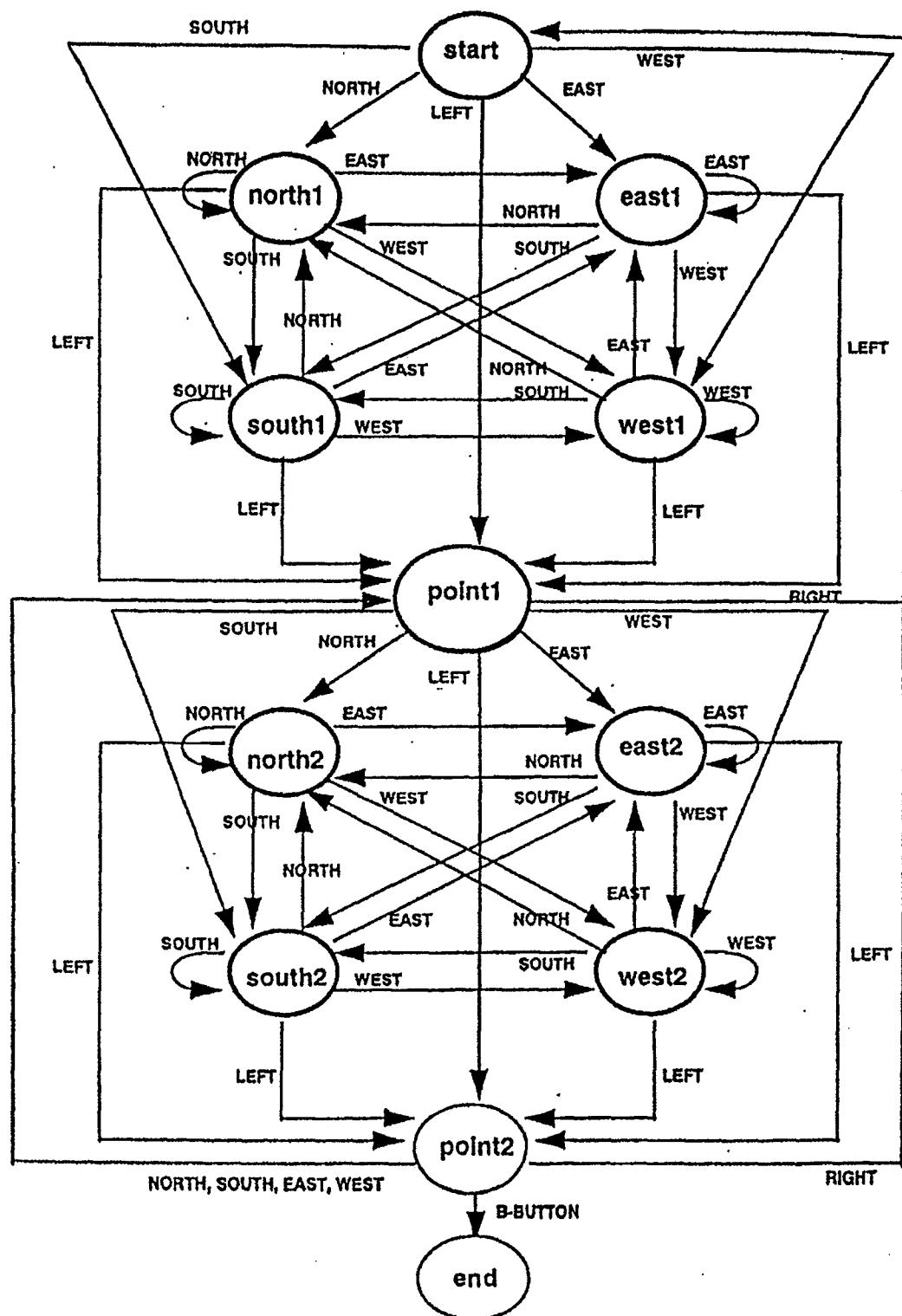


FIG. 3d

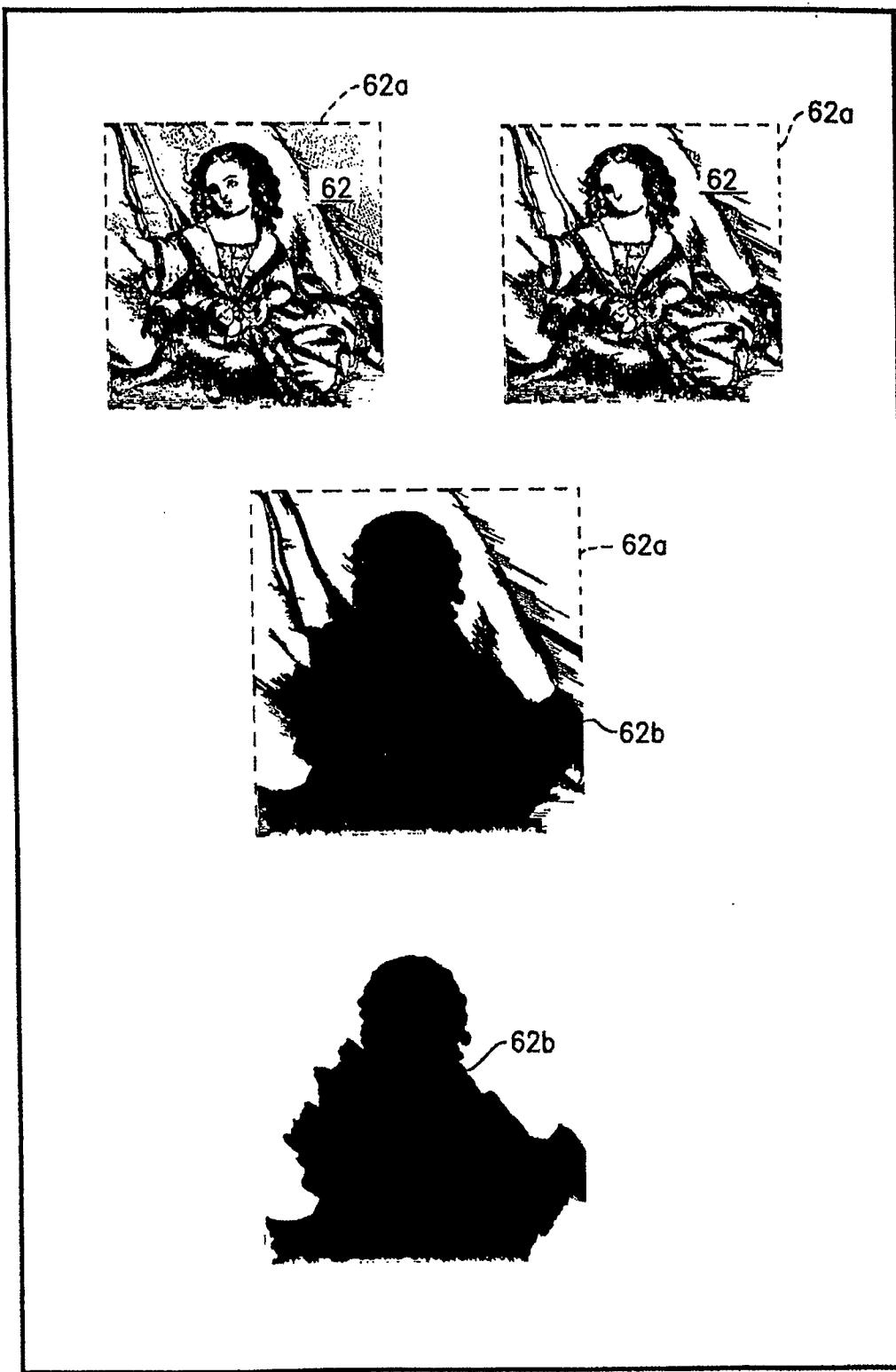
U.S. Patent

Aug. 21, 2001

Sheet 9 of 18

US 6,278,455 B1

FIG. 3e



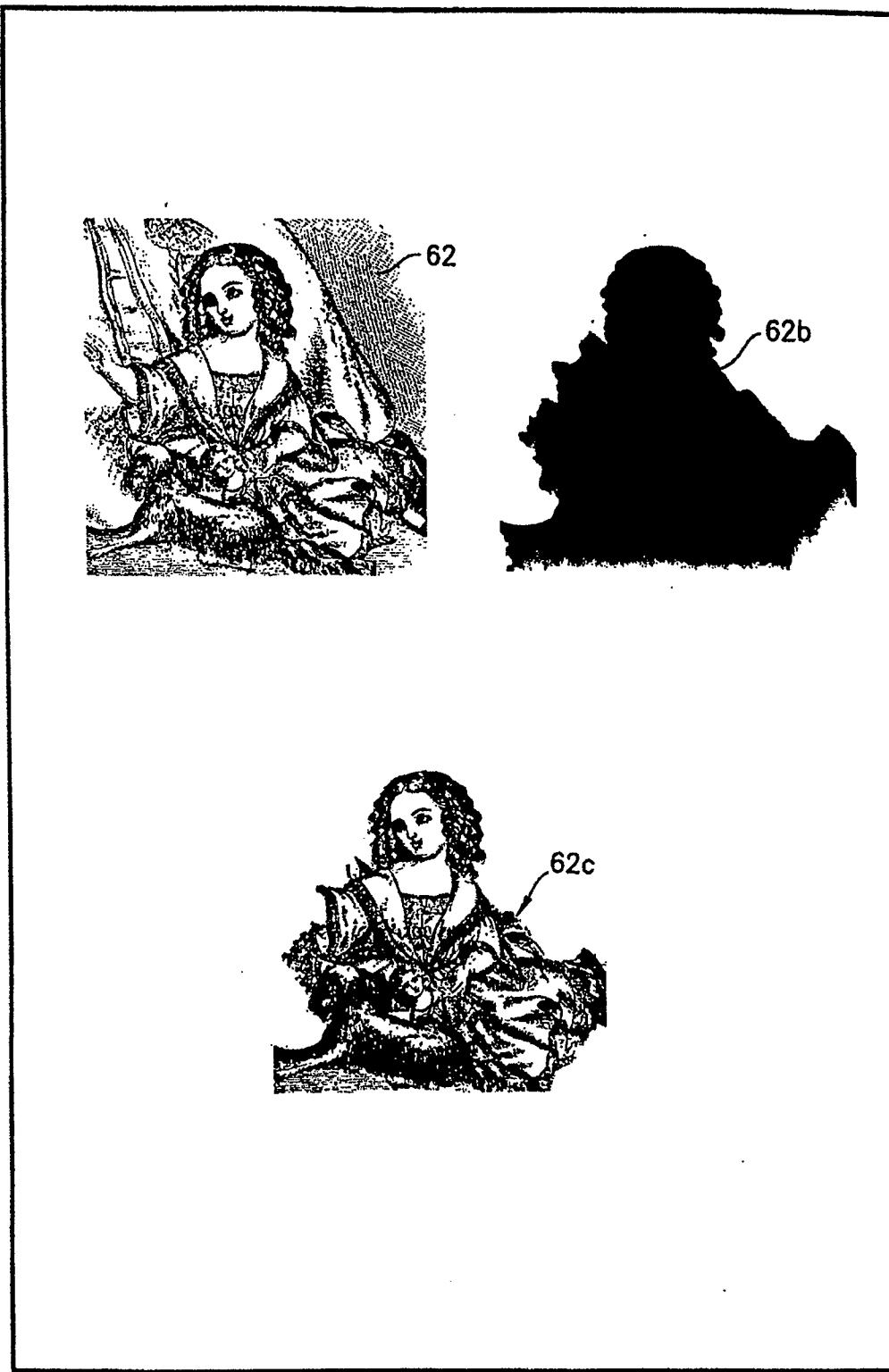
U.S. Patent

Aug. 21, 2001

Sheet 10 of 18

US 6,278,455 B1

FIG. 3f



U.S. Patent

Aug. 21, 2001

Sheet 11 of 18

US 6,278,455 B1

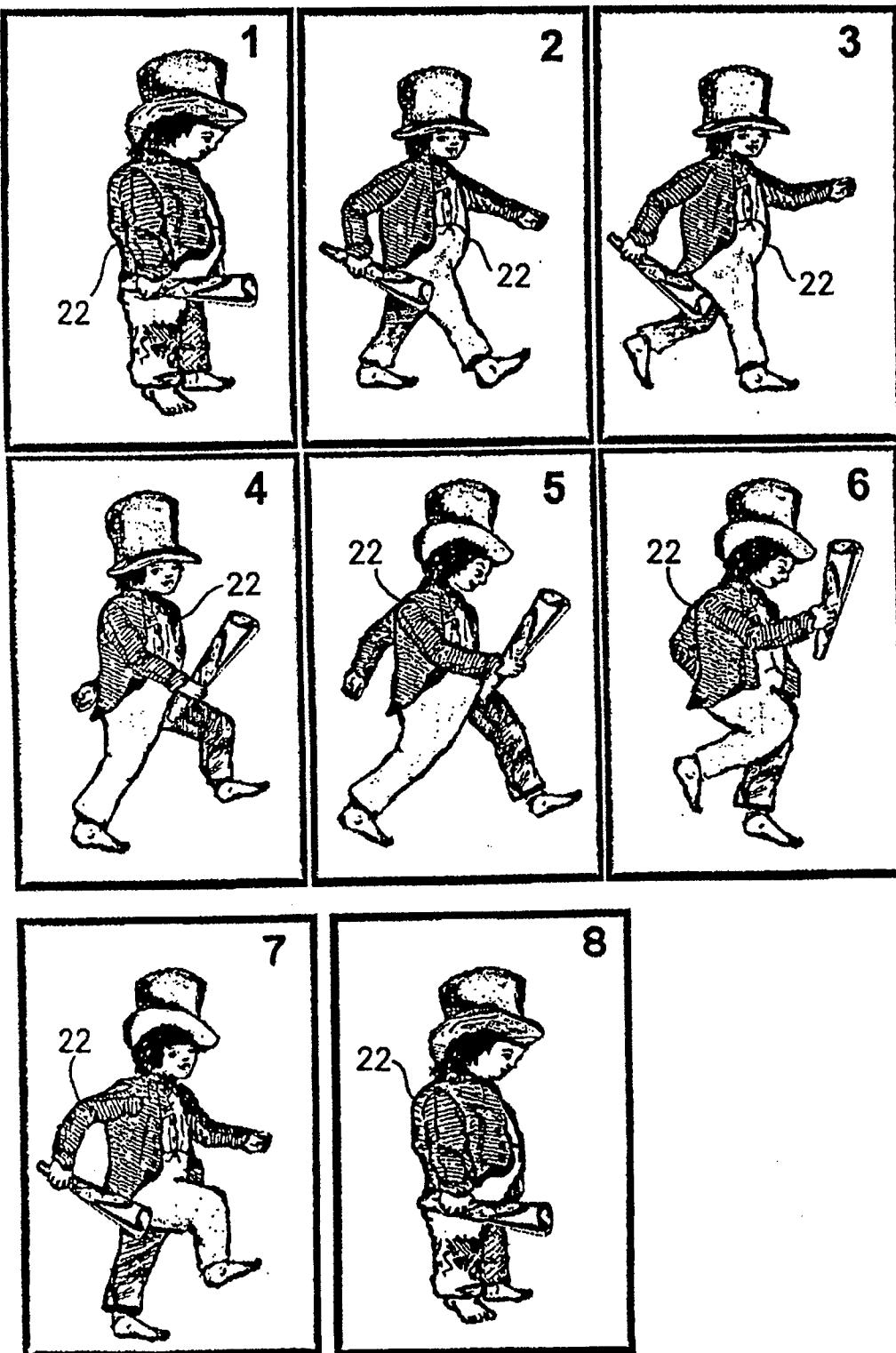


FIG. 4

U.S. Patent

Aug. 21, 2001

Sheet 12 of 18

US 6,278,455 B1

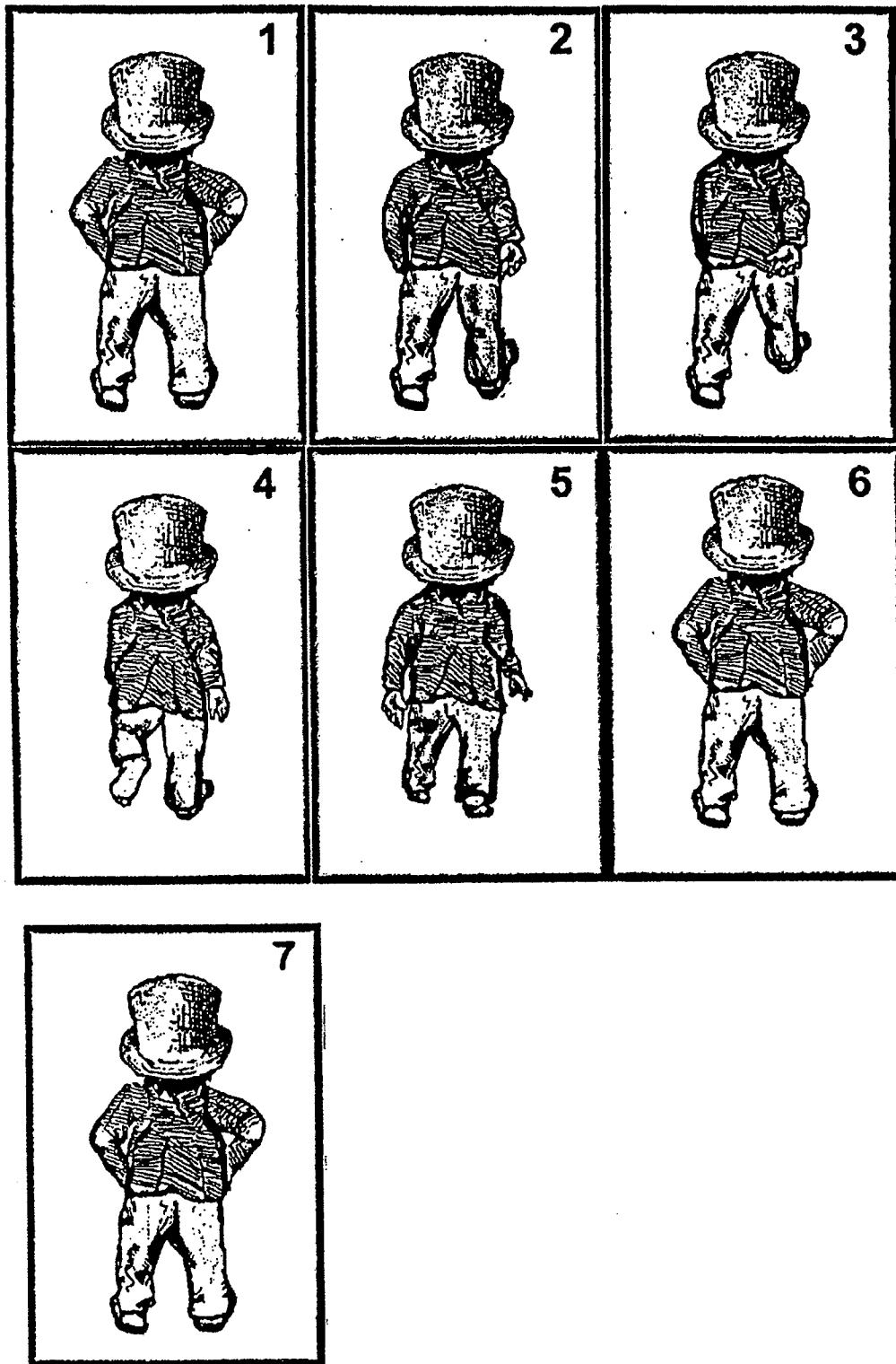


FIG. 4a

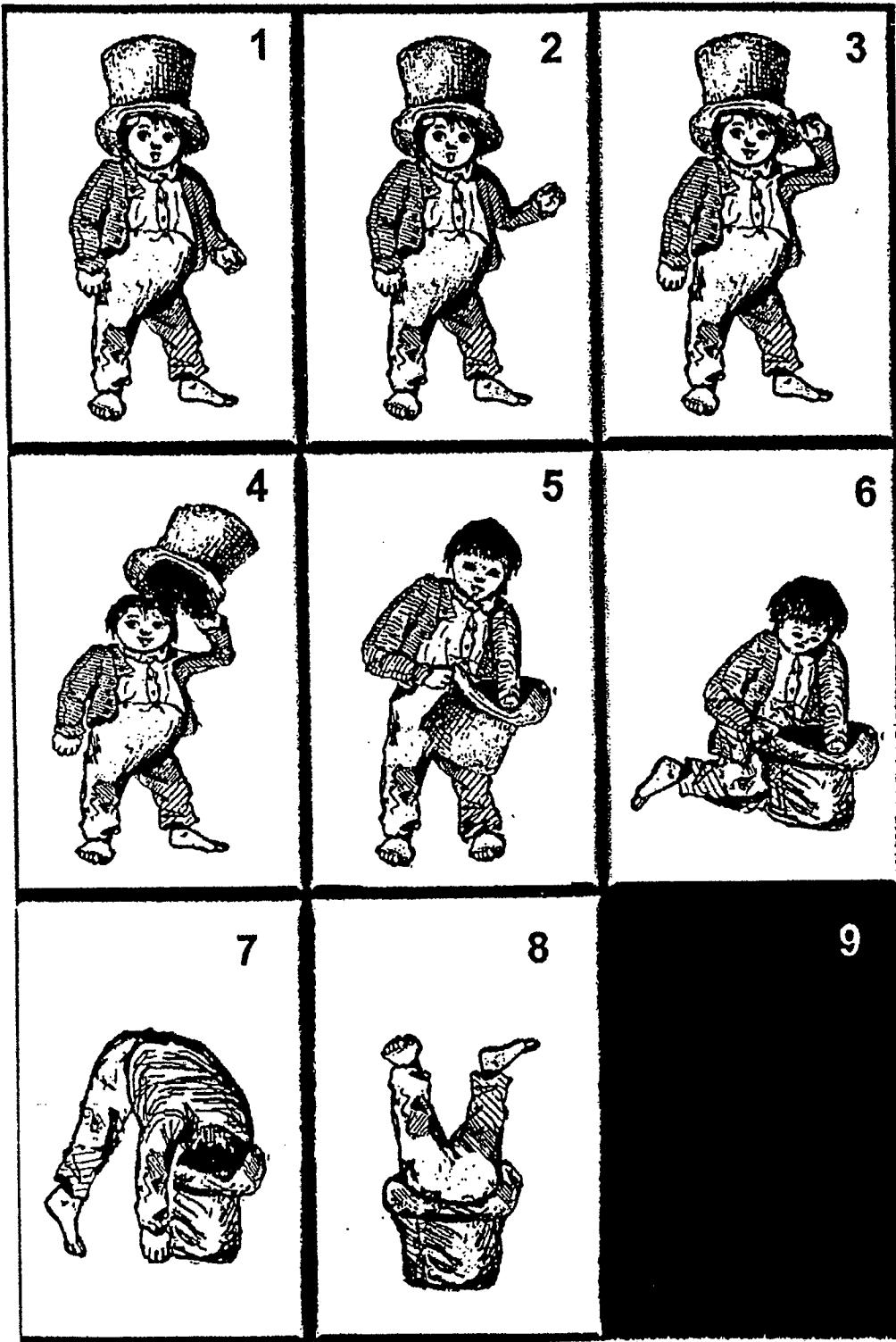
U.S. Patent

Aug. 21, 2001

Sheet 13 of 18

US 6,278,455 B1

FIG. 4b



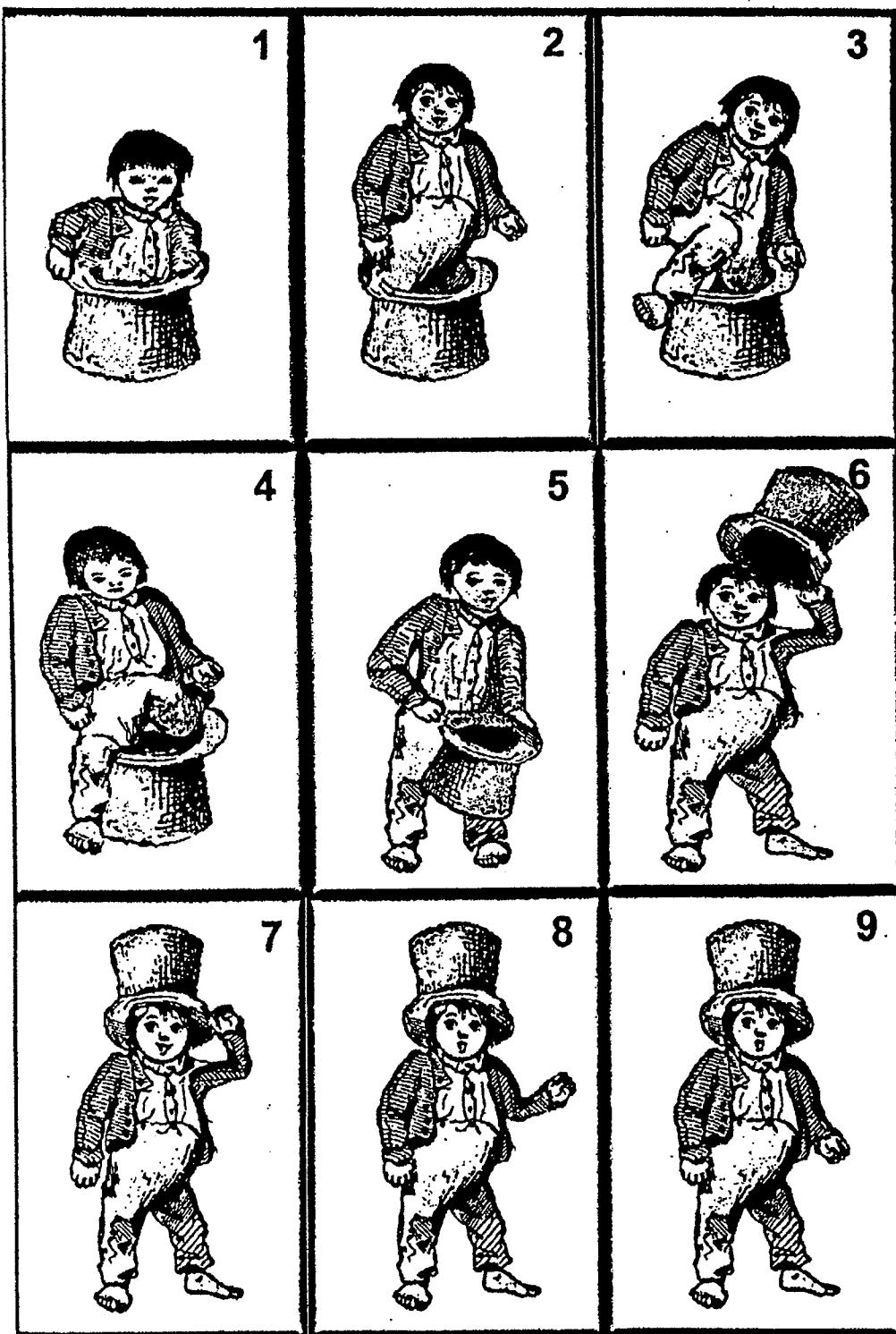
U.S. Patent

Aug. 21, 2001

Sheet 14 of 18

US 6,278,455 B1

FIG. 4c



U.S. Patent

Aug. 21, 2001

Sheet 15 of 18

US 6,278,455 B1

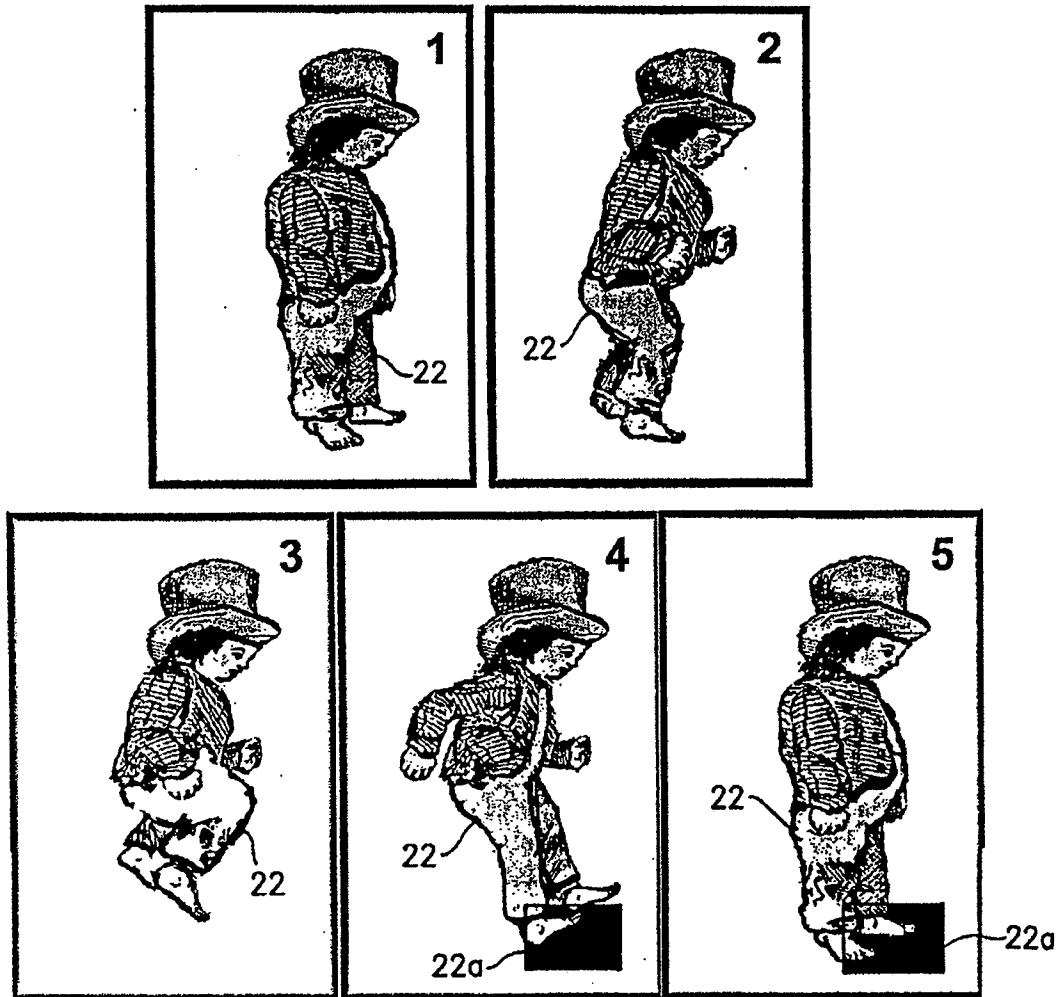


FIG. 4d

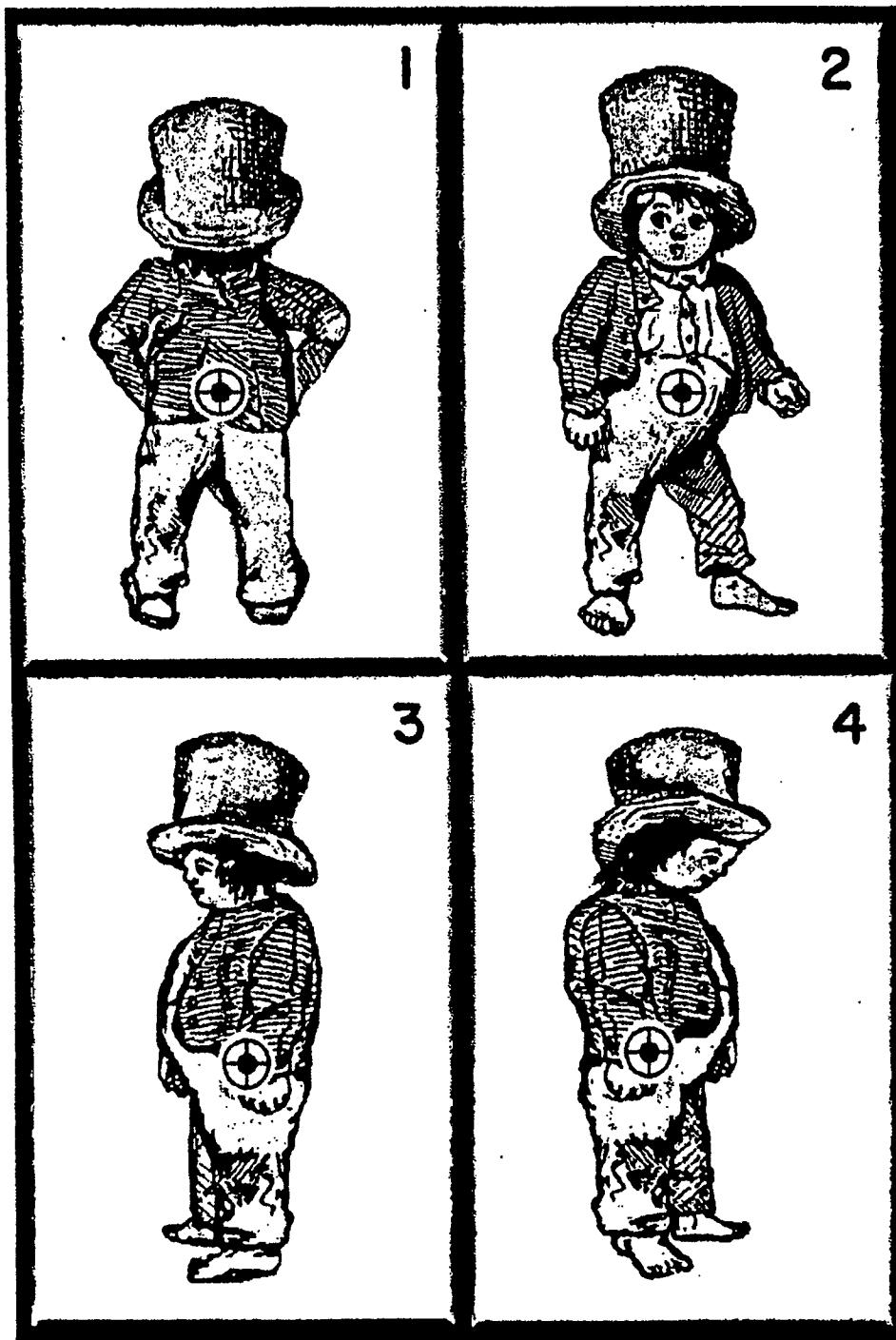
U.S. Patent

Aug. 21, 2001

Sheet 16 of 18

US 6,278,455 B1

FIG. 5



U.S. Patent

Aug. 21, 2001

Sheet 17 of 18

US 6,278,455 B1

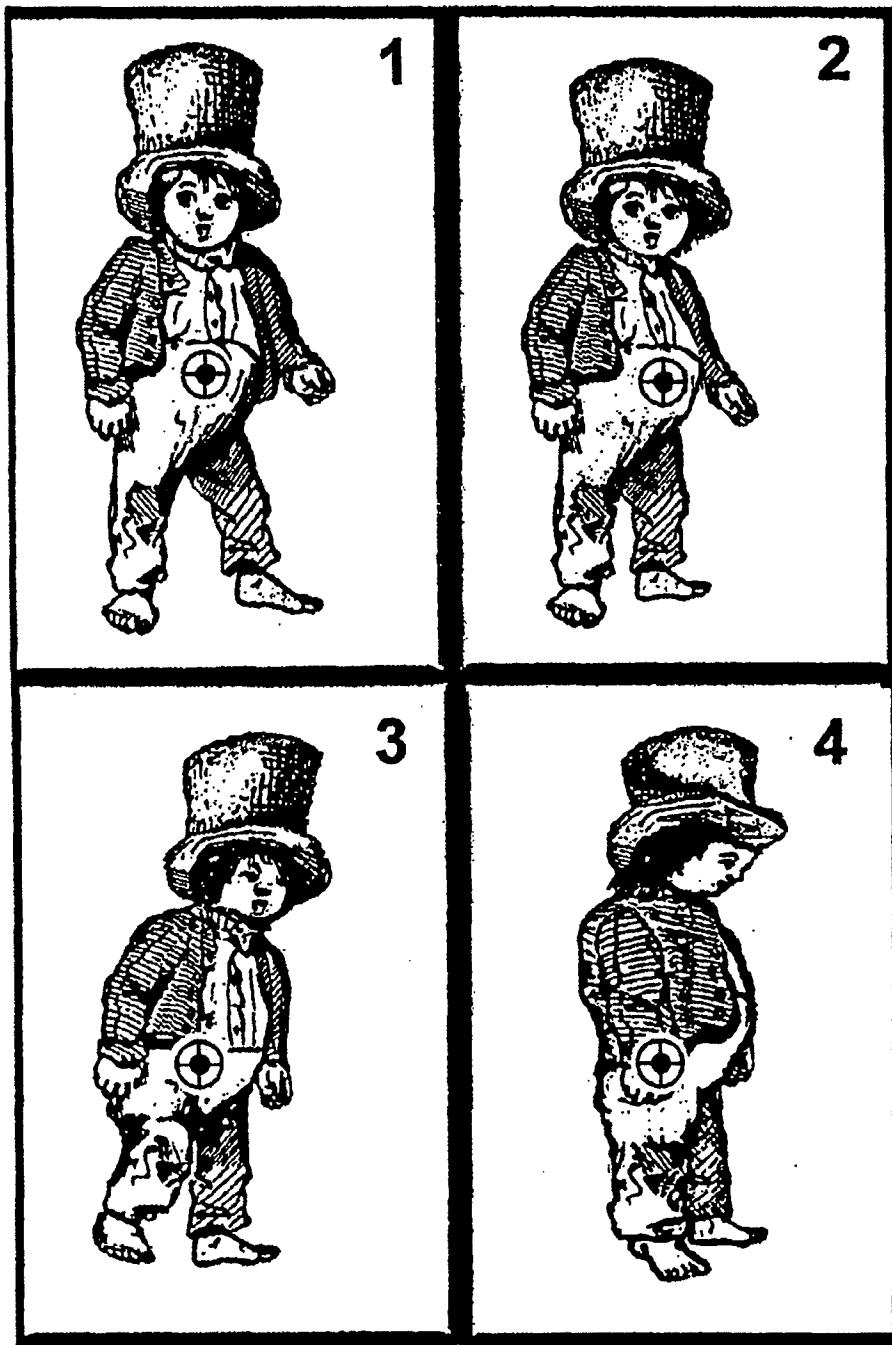


FIG. 5a